STEPOSOL® SC

Stepan introduces a powerful cleaning solvent, naturally derived from vegetable esters.





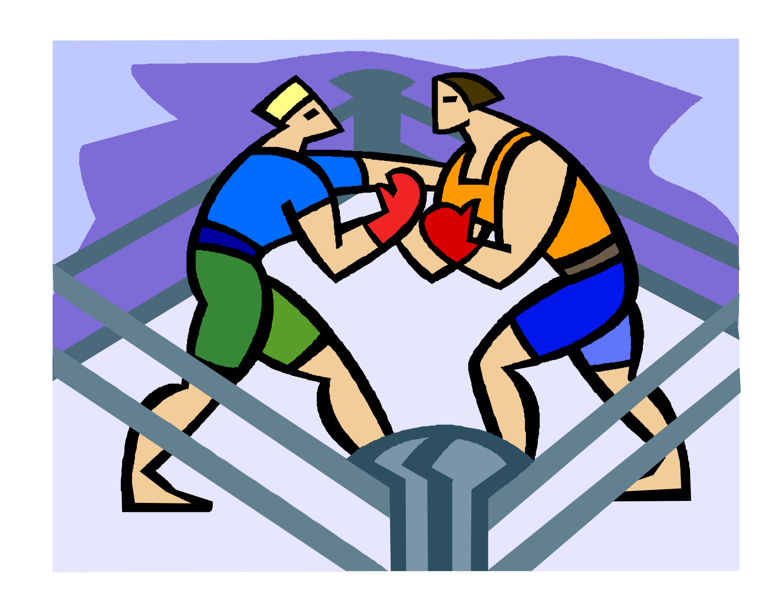
Andrés F. Sánchez Hormaza
Technical Service

Stepan Colombia

2010



STEPOSOL ® SC



Hazardous Solvents **vs.** STEPOSOL SC



STEPOSOL® SC

Derived From Soybeans and Corn





STEPOSOL® SC

Why "Green" Solvents?

- Consumer Demand for Environmentally Friendly Products
- Government Legislation
- Environmental Regulations
  - Requiring companies to switch to safer alternative solvents in manufacturing processes



STEPOSOL® SC

Functionality

- Extender
- Co-Solvent
- Complete Replacement



STEPOSOL® SC

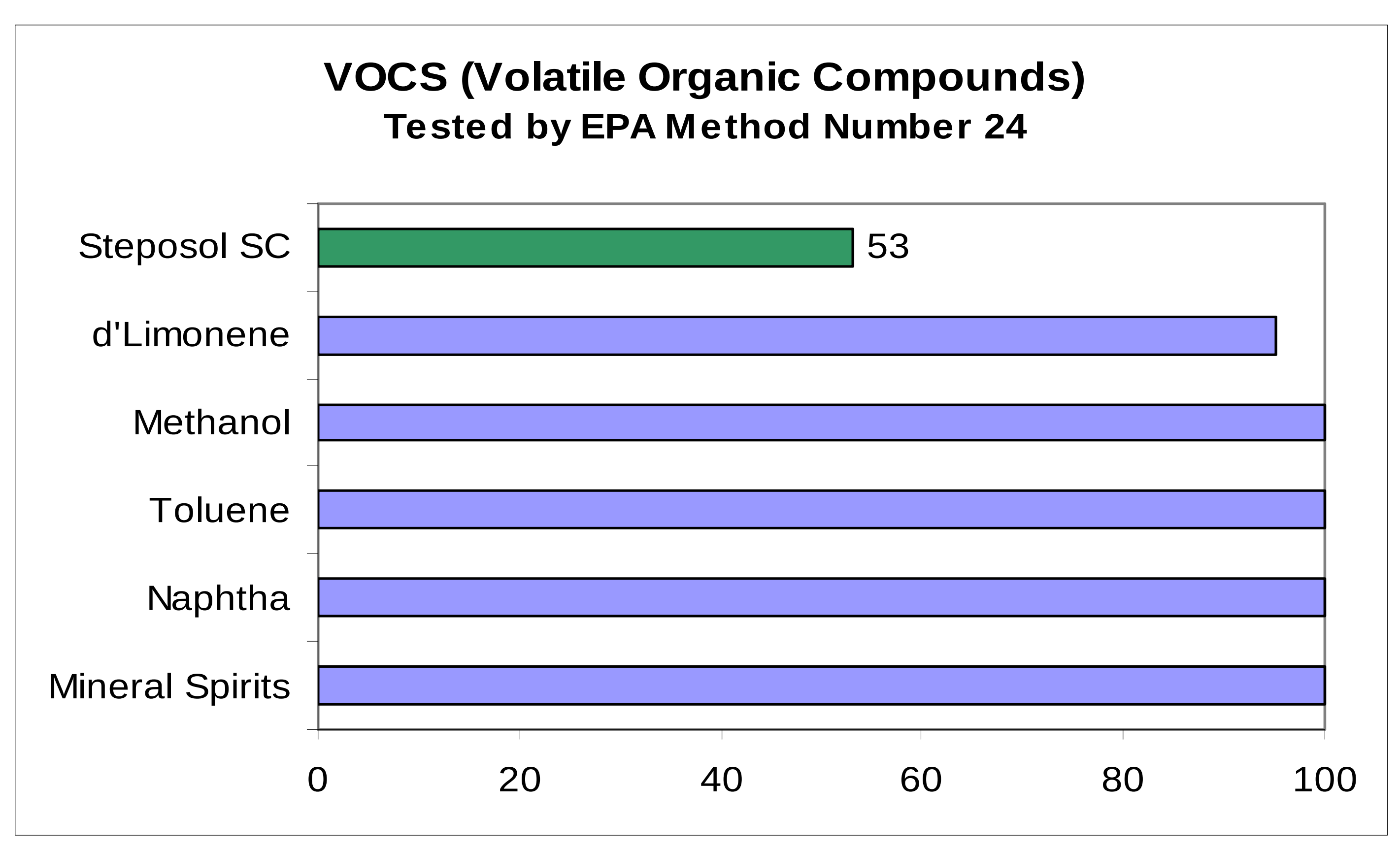
Typical Applications

- Formulated Industrial Cleaners
  - Hand Cleaners
  - Flushing Solvent for Adhesives
- Graffiti and Paint Removal
- Parts Washing Solvent
- Petroleum Degreasing
  - Storage Tank Cleaners
    - Spray Down
    - Wash Out



STEPOSOL® SC

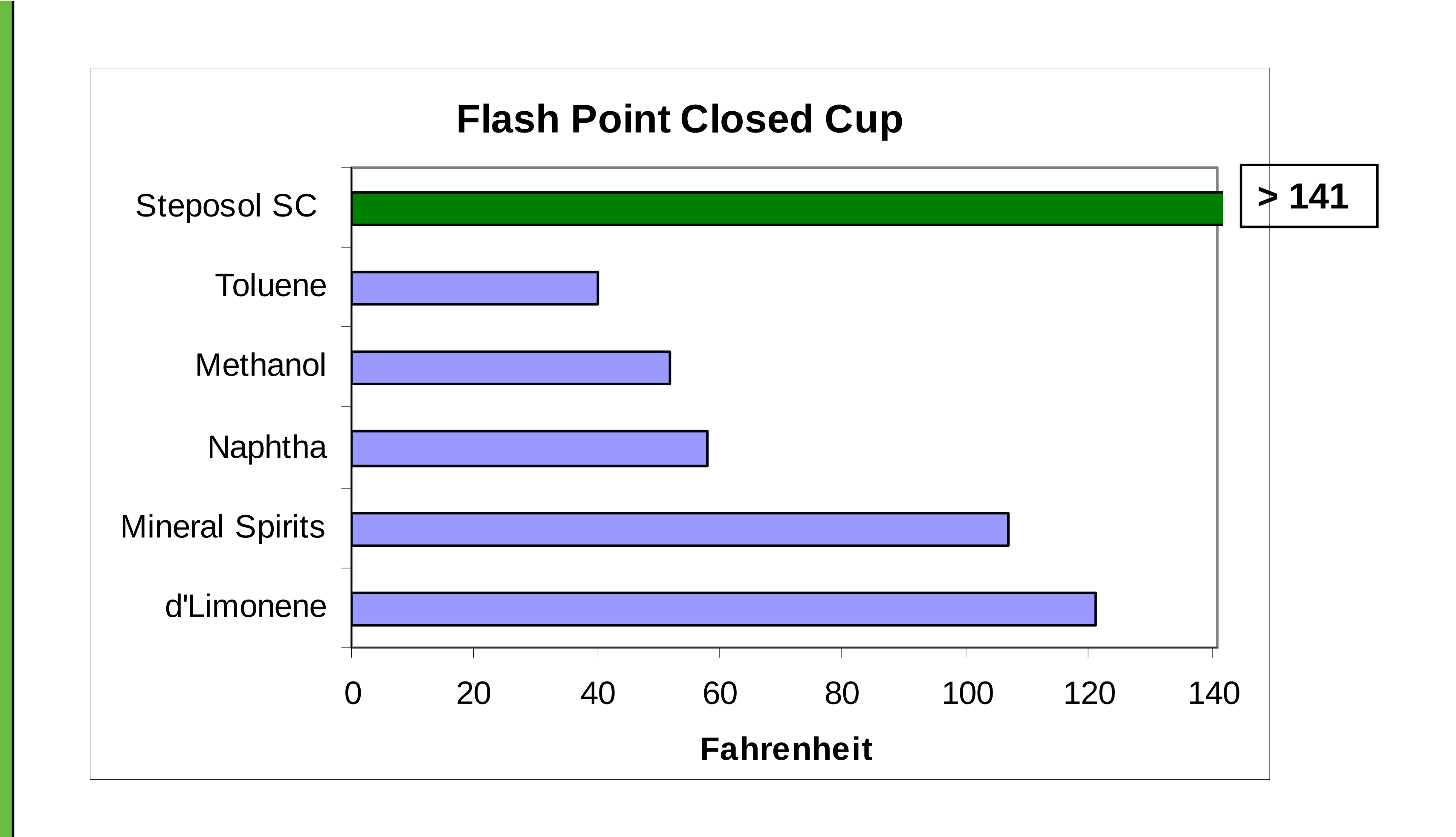
VOCS





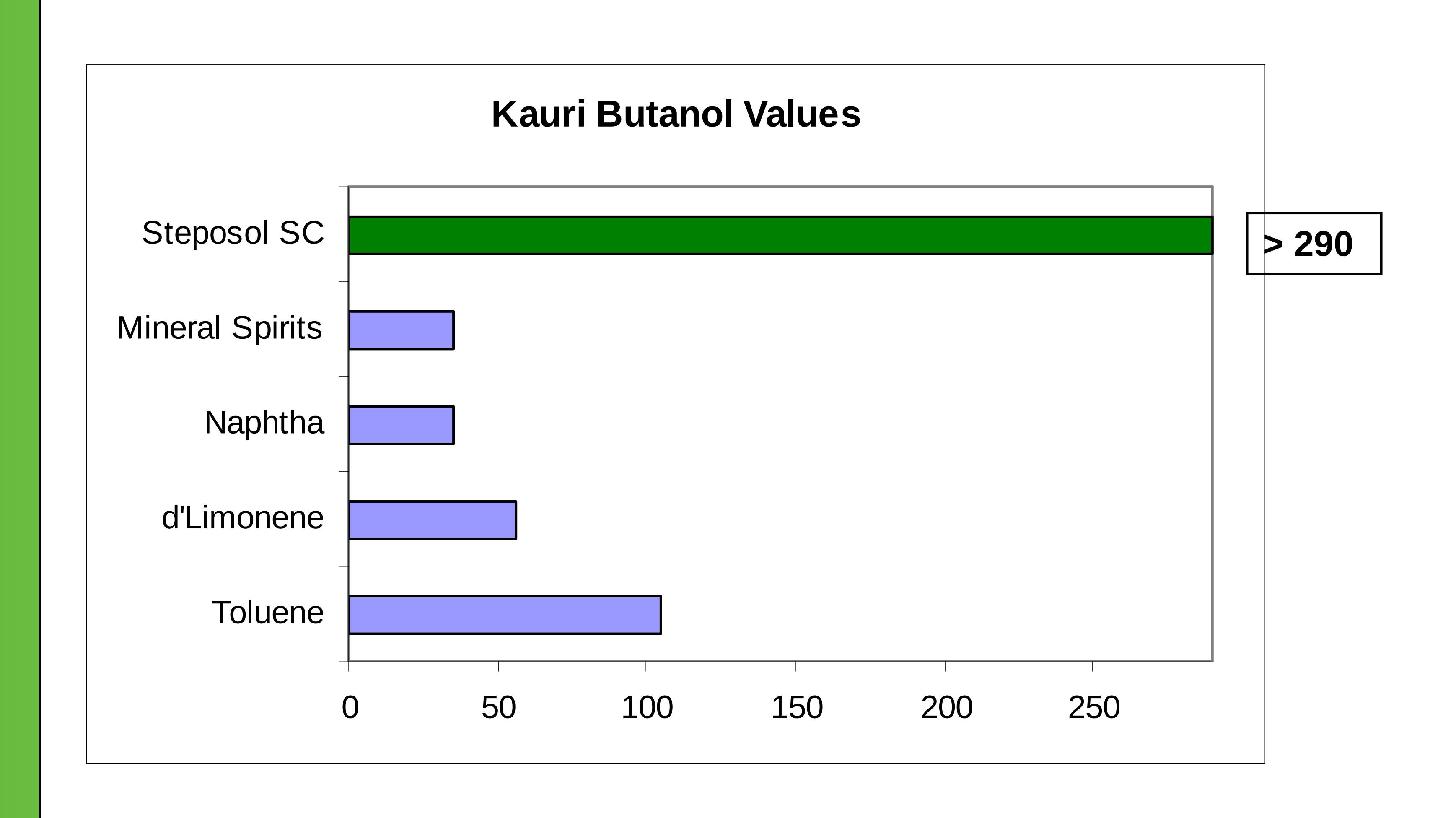
STEPOSOL® SC

Flash Point Closed Cup (Fahrenheit)



STEPOSOL® SC

Kauri Butanol Values



STEPOSOL® SC

STEPOSOL SC or STEPOSOL SB-W?

- Use STEPOSOL SC When:
  - More Aggressive Product is Needed
  - Hand Cleaner is Geared Towards A Highway Worker Who is Laying Asphalt
- Use STEPOSOL SB-W When:
  - Less Aggressive Product is Needed
  - Hand Cleaner is Geared Towards Gardeners



STEPOSOL® SC

STEPOSOL SC or STEPOSOL SB-W?

- Use STEPOSOL SC When:
  - – Customer is cleaning a part and does not want a heavy visible residue left behind.
- Use STEPOSOL SB-W When:
  - – Customer is cleaning a part and would benefit from a residue left behind.







STEPOSOL® SC

Case Study: Paint Stripper Manufacturer

- Customer Formulating Paint Stripper
- Had issues with toluene in their formulation
  - Environmental
  - Health & Safety
  - Shipping







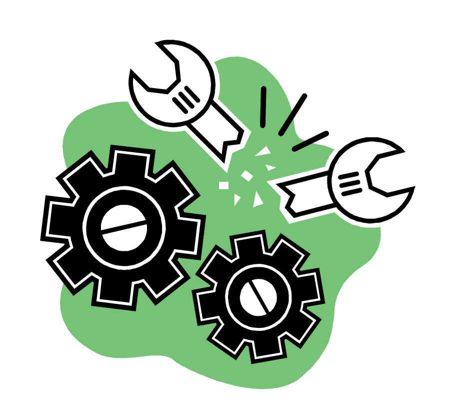
Case Study: Paint Stripper Manufacturer

- Tested STEPOSOL SC as a Drop in Replacement
- Results
  - Product Performed Well
  - Workers Were Not Exposed to Harsh Solvent
  - End Customers Have A Safe Product
  - Reduced Shipping Costs
- Bonus Results
  - Able to Use “Green” Label
  - Created New Market Opportunities
  - Obtain Business Otherwise Lost



STEPOSOL® SC

Case Study: Parts Cleaning

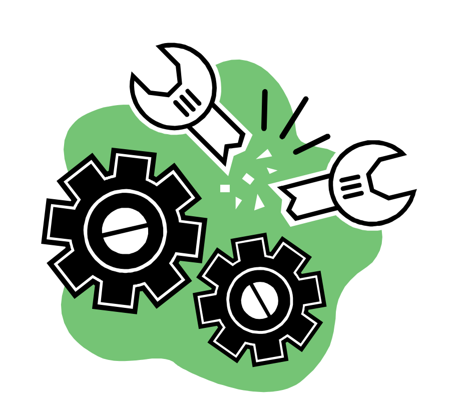


- Parts cleaning manufacturer currently selling cleaning equipment
- Looking for a “green” solvent to sell along with the equipment
- Decided to use a 70/30 blend of the STEPOSOL SC and STEPOSOL SB-W



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Case Study: Parts Cleaning



- Attractive to customers interested in "green" solvents
- Results
  - High Flash Point
  - Longer Life Cycle with the Steposol SC
  - Cleans Better



STEPOSOL® SC

Advantages



- High Flash Point
- Stable Pricing
- Biodegradable
- Blends Well With Other Solvents
- Low VOC
- Naturally Derived
- Water Rinsable



STEPOSOL® SC

Disadvantages

- Not Applicable for Aqueous Formulas – Limited Life
- Distinct Odor
- Too Aggressive in Some Applications



Soy-Based Solvent Alternatives

Summary

- The current solvent market is in need of environmentally friendly and economical solvent alternatives
- Soy-Based esters (methyl soyates) can be used to fill many of the current needs
- Methyl soyate and its' derivatives can provide improved solvency, flash point, toxicity, and biodegradability profiles of cleaning systems

